or release of Class 1 (explosive) materials to the COTP as soon as practicable.

[Amdt. 176-30, 55 FR 52696, Dec. 21, 1990, as amended at 56 FR 66282, Dec. 20, 1991]

§ 176.160 Protection against weather.

Any person loading or unloading packages containing Class 1 (explosive) materials shall take adequate measures to prevent these packages from becoming wet.

§176.162 Security.

A responsible person must be present at all times when the hatches of spaces containing Class 1 (explosive) materials are open. No unauthorized person may be permitted to access spaces in which Class 1 (explosive) materials are stowed. Magazines must be secured against unauthorized entry when loading has been completed, or when loading or unloading is stopped. Packages containing Class 1 (explosive) materials may not be opened on board ship.

\$ 176.164 Fire precautions and fire-fighting.

(a) Matches, lighters, fire, and other ignition sources are prohibited on and near any vessel on which Class 1 (explosive) materials are being loaded, unloaded, or handled except in places designated by the master or the COTP.

(b) A fire hose of sufficient length to reach every part of the loading area with an effective stream of water must be laid and connected to the water main, ready for immediate use.

(c) No repair work may be carried out in a cargo space containing Class 1 (explosive) materials other than those of Division 1.4 (explosive). No welding, burning, cutting, or riveting operations involving the use of fire, flame, spark, or arc-producing equipment may be conducted on board except in an emergency; and, if in port, with the consent of the COTP.

(d) Each compartment, including a closed vehicle deck space, which contains Class 1 (explosive) materials must be provided with a fixed fire extinguishing system. Each adjacent cargo compartment either must be protected by a fixed fire extinguishing installation or must be accessible for firefighting operations.

(e) A vessel must have two sets of breathing apparatus and a power-operated fire pump, which, together with its source of power and sea connections, must be located outside the machinery space.

[Amdt. 176-30, 55 FR 52696, Dec. 21, 1990, as amended at 66 FR 45384, Aug. 28, 2001]

PASSENGER VESSELS

§ 176.166 Transport of Class 1 (explosive) materials on passenger vessels.

(a) Only the following Class 1 (explosive) materials may be transported as cargo on passenger vessels:

(1) Division 1.4 (explosive) materials, compatibility group S.

(2) Explosive articles designed for lifesaving purposes as identified in §176.142(b)(2), if the total net explosive mass (weight) does not exceed 50 kg (110 pounds).

(3) Class 1 (explosive) materials in compatibility groups C, D, and E, if the total net explosive mass (weight) does not exceed 10 kg (22 pounds) per vessel.

(4) Articles in compatibility group G other than those requiring special stowage, if the total net explosive mass (weight) does not exceed 10 kg (22 pounds) per vessel.

(5) Articles in compatibility group B, if the total net explosive mass (weight) does not exceed 5 kg (11 pounds).

(b) Class 1 (explosive) materials which may be carried on passenger vessels are identified in column (10) of the §172.101 table. They must be stowed in accordance with table 176.166(b).

TABLE 176.166(b)—STOWAGE ARRANGEMENTS IN PASSENGER VESSELS

Class/Division	Samples, explosive	Goods, N.O.S. Class 1	Goods shipped under a specific proper shipping name												
			Compatibility group												
			Α	В	С	D	Е	F	G	Н	J	K	L	N	S
1.1	d	d	с	е	е	е	е	с	е	_	с	_	с	_	_
1.2	d	d	_	e	e	е	lе	С	lе	С	С	С	С	_	_

§ 176.168

TABLE 176.166(b)—STOWAGE ARRANGEMENTS IN PASSENGER VESSELS—Continued

Class/Division	Samples, explosive	Goods, N.O.S. Class 1	Goods shipped under a specific proper shipping name												
			Compatibility group												
			Α	В	С	D	Е	F	G	Н	J	K	L	Ν	S
1.3	d	d	_	_	е	е	_	с	е	с	с	с	с	_	_
1.4	d	d	_	b	b	b	b	С	b	_	_	_	_	_	а
1.5	d	d	_	-	_	е		_	_	_	_	_	_	_	_
1.6	d	d	 —	 —	—	—		_	—	_	—	_	_	е	—

a—As for cargo ships, on deck or under deck. b—As for cargo ships, on deck or under deck, in portable magazines only. c—Prohibited.

In containers or the like, on deck only.

(c) Notwithstanding the provisions of paragraph (a) of this section, a combination of the substances and articles listed in paragraphs (a)(1) through (a)(5) of this section may be transported on the same passenger vessel provided the total net explosive mass (weight) of the combination of Class 1 (explosive) materials carried does not exceed the smallest quantity specified for any one of the substances or articles in the combination.

[Amdt. 176-30, 55 FR 52696, Dec. 21, 1990, as amended at 65 FR 58630, Sept. 29, 2000; 66 FR 45384, 45385, Aug. 28, 2001].

CARGO TRANSPORT UNITS AND SHIPBORNE BARGES

§176.168 Transport of Class 1 (explosive) materials in vehicle spaces.

- (a) All transport vehicles and cargo must be properly secured.
- (b) All transport vehicles used for the carriage of Class 1 (explosive) materials must be structurally serviceable as defined in §176.172(a)(2).
- (c) Vehicles used to transport Class 1 (explosive) materials must conform to the requirements in §§177.834 and 177.835 of this subchapter.
- (d) Class 1 (explosive) materials which require special stowage must be transported in transport vehicles approved for the purpose by the Associate Administrator except that Class 1 (explosive) materials in compatibility group G or H may be carried in steel portable magazines or freight containers. Closed transport vehicles may be used as magazines; transport vehicles of other types may be used to transport Class 1 (explosive) materials which require ordinary stowage.

- (e) Class 1 (explosive) materials of different compatibility groups may not be stowed in the same vehicle except as allowed in §176.144 of this subpart.
- Vehicles containing different Class 1 (explosive) materials require no segregation from each other, except that these materials may be carried together under the provisions of §176.144 of this subchapter. In all other instances, the vehicles must be "separated from" one another.
- (g) All transport vehicles used for the transport of Class 1 (explosive) materials must have lashing arrangements for securing the vehicle on the ship and preventing the moving of the vehicle on its springs during the sea passage.
- (h) Where a portable magazine or closed freight container is carried on a chassis, twist locks or other suitable securing arrangements must be provided and made secure.

[Amdt. 176-30, 55 FR 52696, Dec. 21, 1990, as amended at 66 FR 45384, Aug. 28, 2001; 68 FR 61942, Oct. 30, 2003]

§176.170 Transport of Class 1 (explosive) materials in freight containers.

- (a) When Class 1 (explosive) materials are stowed in a freight container, the freight container, for the purposes of this subpart, may be regarded as a magazine but not as a separate compartment.
- (b) Freight containers loaded with Class 1 (explosive) materials, except for explosives in Division 1.4, must not be stowed in the outermost row of containers.
- (c) Freight containers used to transport Class 1 (explosive) materials for

d-As specified by the Associate Administrator, or the competent authority of the country in which the Class 1 (explosive) materials are loaded on the vessel